

IN THE CLAIMS:

Please amend claims 1-4, and add new claims 5-9, as shown in the complete list of claims that is presented below.

1. (currently amended). A data transmitting method ~~[[of]]~~ for use with a network ~~[[line,]] line which connects, via the network line, connects~~ a transmitting apparatus ~~[[for]]~~ transmitting data to in a network segment and a plurality of receiving apparatuses in the same network segment as the transmitting apparatus for receiving said data and transmits said data from and which permits said transmitting apparatus to transmit data to a desired one of said receiving apparatuses, comprising the steps of:

in each of said receiving apparatuses, holding ~~[[an]]~~ a MAC (Media Access Control) address that is peculiar to ~~each of said that~~ receiving apparatuses and a changeable IP (Internet Protocol) address; ~~into each of said receiving apparatuses;~~

in said transmitting apparatus, previously holding ~~[[said]]~~ the MAC address and ~~[[said]]~~ IP address ~~into said transmitting apparatus every of said~~ desired one of said receiving apparatuses so as to correspond to each other;

outputting a predetermined the IP address of said desired one of said receiving apparatuses from said transmitting apparatus to said network line and, ~~[[when]]~~ if said transmitting apparatus detects completion of ~~[[the]]~~ a line connection to said desired one of said receiving apparatuses, ~~which holds said predetermined IP address;~~ transmitting said data from said transmitting apparatus to said desired one of said receiving apparatuses; and

~~[[when]]~~ if said transmitting apparatus detects a defect of said line connection, outputting a transmitting request ~~[[of]]~~ for the IP address and the MAC address from said transmitting apparatus to each of said receiving apparatuses, ~~[[when]]~~ and if said transmitting apparatus detects a coincidence of its own between the MAC address of said desired one of said receiving apparatuses held therein and ~~[[the]]~~ a received MAC address, allowing said transmitting apparatus to update the IP address corresponding to ~~its own the~~ MAC address of the desired one of said receiving apparatuses held therein to the received IP address, and transmitting said data to the desired one of said receiving apparatuses, which holds said received IP address.

AMENDMENT

(10/677,533)

2. (currently amended) The method according to claim 1, wherein ~~[[when]]~~ if said transmitting apparatus detects the completion of said line connection, ~~the transmitting said transmitting apparatus outputs a request~~ for the MAC address is outputted from said transmitting apparatus to said ~~of the connected~~ receiving apparatus, ~~which holds said predetermined IP address~~, and ~~[[when]]~~ if said transmitting apparatus detects ~~[[the]]~~ a coincidence of its own between the MAC address of the desired one of said receiving apparatuses held therein and the received MAC address, said data is transmitted from said transmitting apparatus to ~~said receiving apparatus which holds said predetermined~~ the IP address held in said transmitting apparatus.

3. (currently amended) The method according to claim 1, wherein said transmitting apparatus comprises a personal computer having a printer driver for generating print data as said data and the desired one of said receiving apparatuses is a network printer.

4. (currently amended) The method according to claim 1, wherein the MAC address and IP address received from each receiving apparatus in response to said transmitting request of the ~~IP address and the MAC address is outputted from said transmitting apparatus to said receiving apparatus and are stored in~~ a table, in which the received MAC address and the received IP address of each of said receiving apparatuses are made to correspond to each other, ~~is preliminarily formed~~ in said transmitting apparatus.

5. (new) A method for transmitting data over a network having a physical layer, comprising the steps of:

in each of a plurality of receiving apparatuses that are connected to the physical layer, holding a MAC (Media Access Control) address that is peculiar to that receiving apparatus and an IP (Internet Protocol) address that has been changeably assigned to that receiving apparatus;

in a transmitting apparatus that holds the data and that is connected to the same physical layer as the receiving apparatuses, holding the MAC address and the IP address of a desired one of the receiving apparatuses in correspondence to each other;

outputting the IP address of the desired one of the receiving apparatuses from the transmitting apparatus to the network;

detecting whether or not the transmitting apparatus is connected over the network to the desired one of the receiving apparatuses; and

deciding whether to follow a first procedure or a second procedure depending on the results of the detecting step, the first procedure being followed if the desired one of the receiving apparatuses is detected as being connected and the second procedure being followed if the desired one of the receiving apparatuses is not detected as being connected,

wherein the first procedure comprises sending the data from the transmitting terminal to the desired one of the receiving terminals over the network, and

wherein the second procedure comprises seeking a new IP address that has been assigned to the desired one of the receiving apparatuses, including transmitting a request from the transmitting apparatus to all of the receiving apparatuses to report their MAC address and their current IP address so that the transmitting apparatus can associate the MAC address of the desired one of the receiving apparatuses that is held in the transmitting apparatus with the new IP address of the desired one of the receiving apparatuses.

6. (new) The method of claim 5, wherein the physical layer comprises a network cable to which the transmitting apparatus and the receiving apparatuses are electrically connected.

7. The method of claim 5, wherein the detecting step comprises determining whether the transmitting apparatus is connected with a receiving apparatus having the IP address that is held in the transmitting apparatus.

8. The method of claim 7, wherein, if the transmitting apparatus is determined to be connected with a receiving apparatus having the IP address that is held in the transmitting apparatus, the detecting step further comprises transmitting a request from the transmitting apparatus to the connected receiving apparatus for the connected receiving apparatus to report its MAC address so that the transmitting apparatus can check whether the reported MAC address matches the MAC address of the desired one of the receiving apparatuses that is held by the

transmitting apparatus.

9. The method of claim 7, wherein the transmitting apparatus comprises a personal computer having a printer driver for generating the data and the desired one of the receiving apparatuses is a network printer.